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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,107	08/23/2001	Preston Cutright	EL-8165	9311

7590 10/08/2004

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EXAMINER	
TOOMER, CEPHIA D	

ART UNIT	PAPER NUMBER
1714	

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/935,107	CUTRIGHT ET AL
	Examiner	Art Unit
	Cephia D. Toomer	1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,5 and 9-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5 and 9-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office action is in responses to the amendment filed June 22, 2004 in which claims 1 and 12 were amended.

Claim Rejections - 35 USC § 112

1. The rejection of claims 1 and 10 under 35 USC 112, first paragraph is maintained for the reasons of record.

The examiner appreciates applicant's attempt to overcome the new matter-written description requirement – by supplying a declaration that attests to the facts that Lorama polysaccharides have a molecular weight of less than 500,000. However the declaration is deficient with respect to other polysaccharides that are not Lorama. Applicant has only shown that the polysaccharides of the preferred embodiment have a molecular weight of less than 500,000. The claims are not limited to Lorama polysaccharides because Lorama polysaccharides are chemically modified and water solutions of the polysaccharides have a dextrose equivalent between 0.1 and 100. The same cannot be said for polysaccharides that are not Lorama.

Claim Rejections - 35 USC § 103

2. Claims 1, 3, 5 and 9-14 are rejected under 35 USC 103(a) as being unpatentable over Derrick (US 3,893847).

Derrick teaches fuel compositions comprising finely ground minerals or coal dust, water soluble polymers and water (see abstract; col. 1, lines 3-8; col. 3, lines 7-14). The polymers include copolymers of sodium acrylate and acrylamides and fuctionalized

starches (polysaccharide resins) (see col. 1, lines 62-68; col. 2 lines 1-23; Table 2). The coal dust, water and polymer are combined and are compacted (see claims 1-4). Derrick teaches the limitation of the claims other than the different that are discussed below.

Derrick fails to teach that the polysaccharide resins have a molecular weight of less than 500,000. However, a prima facie case of obviousness exists where the claimed ranges and the prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Crop of America v. Banner, 227 USPQ 773 (Fed. Cir. 1985).*

With respect to the type of coal the dust is derived from, Derrick's general teaching of coal dust encompasses all coals and to have selected anthracite, in the absence of unexpected results, would have been obvious to skilled artisan.

Derrick also fails to teach that the fuel composition is prepared by a pug mill. However, it would have been obvious to one of ordinary skill in the art to have used such a device because Derrick teaches that the fuel of his invention is prepared by use of a rotating disc pelletizer and a pug mill is a similar device.

3. Applicant's arguments have been considered but are not deemed to be persuasive.

Applicant argues that Derrick is directed to compositions containing finely ground minerals mixed with water soluble polymers having a molecular weight greater than 500,000 and that Derrick does not disclose polysaccharide resins having a molecular weight of less than 500,000.

Derrick teaches that his invention may be used in the manufacture of briquettes from coal dust (see col. 3, lines 9-10). With respect to the molecular weight of the polysaccharide, it is well settled that a prima facie case of obviousness exists where the claimed ranges and the prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. See MPEP 2144.05; *Titanium metals Corp. v. Banner 227 USPQ 773 (Fed. Cir. 1985).*

Applicant argues that Derrick discloses that the suitable amount of polymer is from 0.001 lb to 10 lbs (up to 0.5 wt %), whereas the present invention requires at least 0.5 wt% of the polymer.

Applicant's claims require about 0.5 wt% to 8.0 wt % of the polysaccharide. It is well settled that the terms "about 0.5" reads on a concentration of at least 0.5 and slightly lower, thus the ranges of the prior art and the instant claims overlap. In the case where the claimed ranges overlap ranges disclosed by the prior art, a prima facie case of obviousness exists. See *In re Wertheim, 191 USPQ 90 (CCPA 1976); In re Woodruff, 16 USPQ 2d 1934 (Fed. Cir,1990).* Applicant has not shown that unexpected results are obtained with the use of the polysaccharide in amounts slightly higher than .5 wt%.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cephia D. Toomer
Primary Examiner
Art Unit 1714

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